

Amendment to the Abstract:

- (1) Please amend the Abstract by replacing the present abstract with the following:

This invention relates generally to a forming an array of single-wall carbon nanotubes (SWNT) in an electric field and compositions thereof. In one embodiment, a purified bucky paper of single-wall carbon nanotubes is used as the starting material. Upon oxidative treatment of the bucky paper surface, many tube and/or rope ends protrude up from the surface of the paper. Disposing the resulting bucky paper in an electric field results in the protruding tubes and or ropes of single-wall carbon nanotubes aligning in a direction substantially perpendicular to the paper surface. These tubes tend to coalesce to form a molecular array. In another embodiment, a molecular array of SWNTs can be made by “combing” the purified bucky paper starting material with a sharp microscopic tip to align the nanotubes.